



GROWING PAINS

FACTS ABOUT
WEED INVASIONS IN THE
WESTERN UNITED STATES



Spotted Knapweed

CAUSE FOR CONCERN

- Alien plant species — noxious weeds — are spreading rapidly throughout the Western United States, choking out native species, damaging the health of the land and causing serious economic hardships.
- Estimates indicate invasive plants are spreading at about 4,600 acres per day on federal lands alone in the Western United States.
- Weeds have invaded approximately 17 million acres of public rangelands in the West — more than quadrupling their range from 1985-1995.
- There are hundreds of weed species in the Western United States. Some of the most common/problematic include leafy spurge, spotted knapweed, scotch thistle, purple loosestrife and yellow starthistle.
- Emerging weed problems in the West include sulfur cinquefoil, squarrose knapweed, perennial pepperweed, and dyers woad.

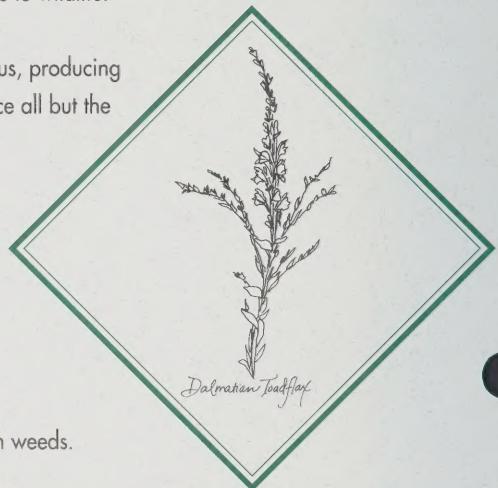
A BIOLOGICAL WILDFIRE OUT OF CONTROL

- In Montana spotted knapweed increased from a few plants in 1920 to 5 million acres today.
- In Idaho rush skeletonweed increased from a few plants in 1954 to 4 million acres today.
- In northern California yellow starthistle increased from 1 million acres in 1981 to 10 million acres today.

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ECOLOGICAL DAMAGE

- Weeds are destroying wildlife habitat and forage. Wildlife needs a variety of forage to thrive. Unfortunately, because of aggressive growing habits, invasive weeds often outcompete native plants, replacing plant diversity with sometimes poisonous monocultures.
- Weeds are damaging endangered species and native plants. Two-thirds of all federally-listed species, and many native plants, are threatened by weeds.
- Weeds are increasing soil erosion. This damages vital streams that provide habitat for fish, including threatened and endangered species such as salmon.
- Weeds are increasing groundwater loss. Infested areas have higher water runoff and some weeds have a higher rate of evapotranspiration, which means that less water is stored in the ground and less water is available to wildlife.
- Weeds are blocking access to recreational sites. Some noxious weeds are poisonous, producing irritating rashes after human contact. Others have 2-inch-long thorns that will pierce all but the most rugged materials. Invasive plants do not respect property boundaries.



ECONOMIC COSTS ARE GREAT

- Weeds cost Western States hundreds of millions of dollars each year.
- The federal Bureau of Land Management alone spends over \$2.7 million a year on weeds.
- The annual economic impacts of leafy spurge on grazing and wildland in Montana, North and South Dakota, and Wyoming are approximately \$129 million.
- A 1,300-acre ranch near Klamath Falls, Oregon, was recently abandoned due to infestations of leafy spurge. It later sold at auction for 10 percent of the value of surrounding property.
- The value of a weed infested ranch in North Dakota recently was reduced by 60 percent.
- A ranch in Colorado that once supported cattle will support none today because of leafy spurge.

A SILENT INVASION: HOW ARE WEEDS SPREAD?

- Weeds are spread in many ways. Naturally, their seeds travel by wind and water, or by hitchhiking onto wildlife, horses, livestock and people.
- Seeds can become embedded in the tire treads of motor vehicles; hikers and backpackers can inadvertently spread weeds by walking through weeds and picking up seeds on their clothes, shoes, tents or other gear.

ON THE POSITIVE SIDE

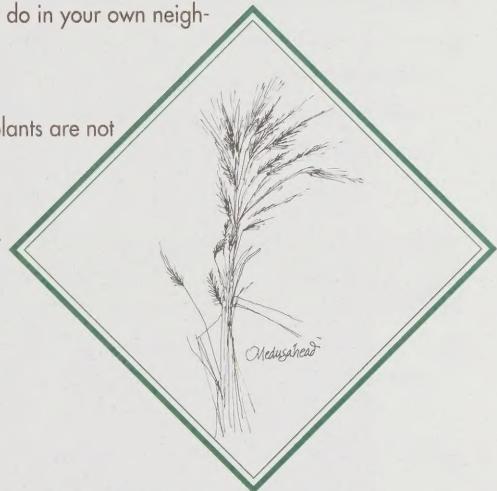
- Outstanding opportunities exist to protect uninfested lands.
- Of the approximately 350 million acres of federal public lands in the West, about 95 percent are not infested — yet.

AN OUNCE OF PREVENTION

- Early detection and eradication of small infestations and prevention of new infestations provide the most cost-effective ways to manage weeds.
- Integrated weed management strategies are calling for cooperation with all affected landowners, agencies, industry and user groups.
- This cooperation includes many partnerships to foster public education, prevention, detection, control, restoration, monitoring, and research.

WHAT YOU CAN DO

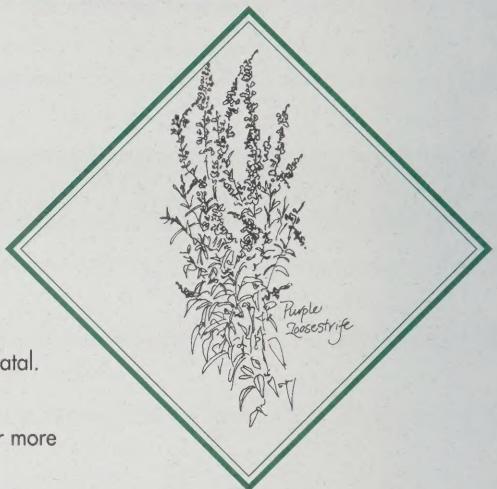
- There are many ways to get involved, locally and nationally. Start by contacting your local extension office, county weed control supervisor, land managers, garden clubs, and nature centers to find out what you can do in your own neighborhood, or while hiking, camping, or visiting the public lands.
- Learn what weeds are in your own neighborhood, and make sure the seeds to these plants are not in your clothes or camping gear. You don't want to introduce these into new areas!
- Check with a local ranger/land manager before starting a backcountry hike. Find out how to identify the problem weed species in the area. Report any infestations you may come across.
- Clean all recreation gear, clothing and shoes before leaving an area to avoid inadvertently taking seeds along to the next campsite, county or state.



- Do not camp in or hike through weed infested areas. Stay on designated trails.
- Drive only on established roads away from weed infested areas (seeds can become imbedded in tire treads, traveling to new areas).
- Do not pick flowers or plants. Many wildflowers are actually invasive weeds.
- Tell your friends and family about this problem.
- If you use pack animals, carry only feed that is certified weed free. At least four days before entering backcountry areas, feed pack animals only food that is certified weed free. Remove weed seeds from pack animals by brushing them thoroughly and cleaning their hooves before transporting. Clean saddles and tack.

DID YOU KNOW? WILD FACTS ABOUT WESTERN WEEDS

- Leafy spurge has a tap root that can reach 25 feet underground.
- One spotted knapweed plant can produce up to 1,000 seeds each year.
- Early settlers brought dyers woad to America for use in dyes — hence its name.
- Many invasive weeds, such as purple loosestrife and some thistles, are so attractive they are still used as ornamental plants in gardens.
- Yellow starthistle is poisonous to horses, causing a nervous disorder that can be fatal.
- Fire can actually benefit some weed species, giving them a competitive edge over more shallow-rooted plants.



A LITTLE HISTORY

- Invasive weeds are generally non-native plants introduced to North America from Europe and Asia. Weeds began entering this country in earnest in the mid-1800s, and new arrivals continue to this day. These plants have spread at an alarming rate because, unlike native species, there are no native insects, fungi, or diseases to control their growth and spread in this country. What initially began with a handful of plants in the 19th century now number in the hundreds of millions.

WEEDS ON THE WEB

- There are many weed resources on the World Wide Web. Here are a few to get you started. Check out the BLM's weed education materials at <http://www.blm.gov/education/education.html>.
- For lots of additional weed links, check out <http://bluegoose.arw.r9.fws.gov/NWRSFiles/InternetResources/weeds.html>
- The Weed Science Society of America has some great information, including a photo library of over 200 common American weeds. Check it out at <http://piked2.agn.uiuc.edu/wssa/>

FOR MORE INFORMATION

- For a free brochure, or other BLM information on weeds, write to the Bureau of Land Management's (BLM) National Weed Team at BLM, Montana State Office, P.O. Box 36800, Billings, MT 59107-6800.